Applicant: Manfred Engelhardt et al. Attorney's Docket No.: 12816-042001

S 1556 SB/pra

Serial No.: 10/048,192 Filed: January 25, 2002

Page : 4 of 4

ŧ

REMARKS

Applicant amends claim 1 to recite the limitation of the upper layer being made of a ferroelectric material or a material having a high dielectric constant and to include the deposition of a second layer including O₃/TEOS-SiO₂ into the contact hole and onto a top surface proximate to the contact hole.

Claims 4-6, now being superfluous have been cancelled. Applicant also cancels claims 8-20 without prejudice. Applicant cancels these claims only to expedite prosecution of this application. Applicant reserves the option of pursuing these claims in a continuation application. Now pending are claims 1-3 and 7 of which claim 1 is independent.

The examiner rejected claims 1-20 as being unpatentable over Jeng or Wolstenholme in view of Huang and Lien. But, neither Jeng nor Wolstenholme teach etching a contact hole into a substrate having an upper layer made of a ferroelectric material or a material having a high dielectric constant. Nor do these references teach having the O₃/TEOS-SiO₂ serve as a lateral seal of the upper layer during the lowering of the depression. Both of these limitations are now recited in the amended claim 1.

In Jeng the upper layer is either a TEOS oxide, PECVD oxide, or polysilicon (col. 7, lines 36-37). Likewise, in Wolstenholme the top layer is a hardmasking layer, not a ferroelectric material or a material having a high dielectric constant as in claim 1. Thus, the O₃/TEOS-SiO₂ spacer of Jeng and Wolstenholme merely defines the minimum dimension of the etched contact; it does not function as a lateral seal of the upper layer during the lowering of the depression as in amended claim 1. Therefore, Jeng and/or Wolstenholme, whether taken alone or combined with Huang and/or Lien, fail to render obvious the invention of claims 1-3 and 7.

Applicant asks that all claims be allowed.